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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: MARK BERCH Examiner # : 59193 Date: 12/2/05

Art Unit: 1624 Phone Number: 2- 0663 Serial Number: 10695895

Location (Bldg/Room#): 5C01 (Mailbox #): 5C18 Results Format Preferred (circle): (PAPER) DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: _____

Inventors (please provide full names): _____

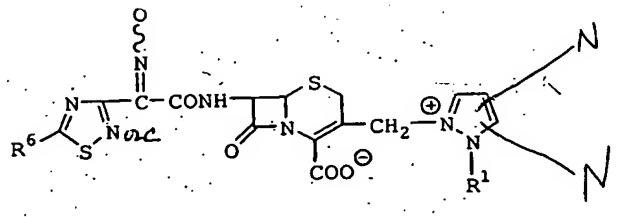
_____

Earliest Priority Date: _____

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*



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Date Searcher Picked Up: _____

Date Completed: _____

Searcher Prep & Review Time: _____

Online Time: _____

Type of Search

_____ NA Sequence (#)

_____ AA Sequence (#)

_____ Structure (#)

_____ Bibliographic

_____ Litigation

_____ Fulltext

_____ Other

Vendors and cost where applicable

_____ STN _____ Dialog

_____ Questel/Orbit _____ Lexis/Nexis

_____ Westlaw _____ WWW/Internet

____ In-house sequence systems

____ Commercial ____ Oligomer ____ Score/Length

____ Interference ____ SPDI ____ Encode/Transl

_____ Other (specify)

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=> d his ful

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                SEL RN

     FILE 'REGISTRY' ENTERED AT 09:53:31 ON 06 DEC 2005
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L4           57 SEA ABB=ON  PLU=ON  L3 AND (NSCNC/ESS OR NCSC2/ESS)

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     FILE 'REGISTRY' ENTERED AT 10:00:16 ON 06 DEC 2005
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L11           3 SEA ABB=ON  PLU=ON  L10

     FILE 'BEILSTEIN' ENTERED AT 10:25:14 ON 06 DEC 2005
L12           0 SEA SSS FUL L8
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FILE 'MARPAT' ENTERED AT 10:26:27 ON 06 DEC 2005

FILE HOME

FILE HCAPLUS

FILE COVERS 1907 - 6 Dec 2005 VOL 143 ISS 24
FILE LAST UPDATED: 5 Dec 2005 (20051205/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 DEC 2005 HIGHEST RN 869333-72-2
DICTIONARY FILE UPDATES: 5 DEC 2005 HIGHEST RN 869333-72-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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**************************************************************
*                                                            *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                            *
**************************************************************
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE BEILSTEIN
FILE LAST UPDATED ON OCTOBER 10, 2005

FILE COVERS 1771 TO 2005.
FILE CONTAINS 9,363,954 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *
****

NEW
*** PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.**
*** NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.**

FILE MARPAT
FILE CONTENT: 1988-PRESENT (VOL 143 ISS 22)(20051125/ED)

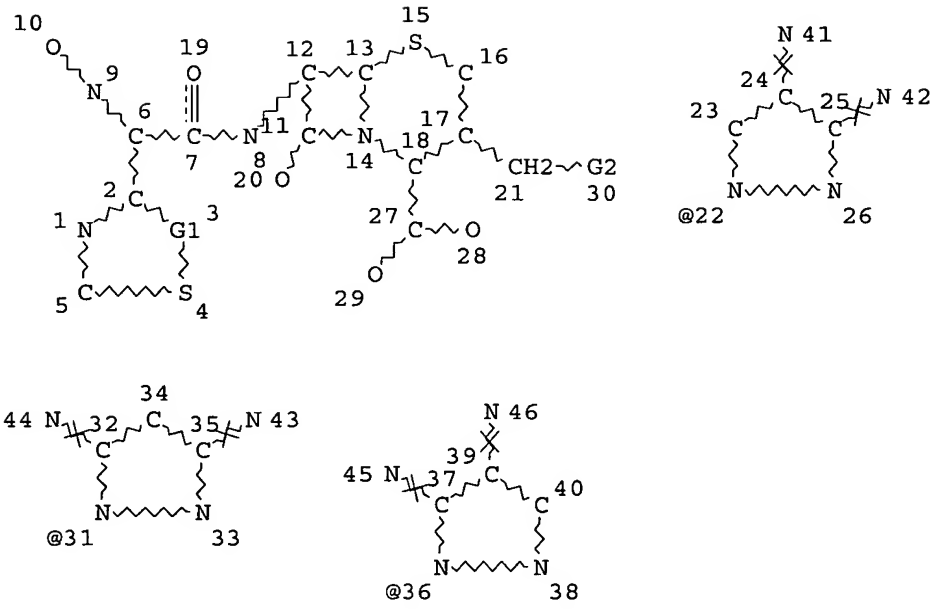
MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6939973 06 SEP 2005
DE 1020040544 01 SEP 2005
EP 1570835 07 SEP 2005
JP 2005272454 06 OCT 2005
WO 2005097052 20 OCT 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

=> d l11 que stat
L8 STR



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VAR G2=22/31/36
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CONNECT IS E2 RC AT 8
CONNECT IS E2 RC AT 9
CONNECT IS E1 RC AT 20
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 46

STEREO ATTRIBUTES: NONE
L10 72 SEA FILE=REGISTRY SSS FUL L8
L11 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L10

=> d l11 ibib abs hitstr 1-3
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L11 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:283338 HCAPLUS
DOCUMENT NUMBER: 142:336179
TITLE: Preparation of cephem compounds as antimicrobials for the treatment of infectious disease
INVENTOR(S): Yamanaka, Toshio; Murano, Kenji; Toda, Ayako; Ohki, Hidenori; Oogaki, Masaru; Okuda, Shinya; Kawabata, Kohji; Inoue, Satoshi; Misumi, Keiji; Itoh, Kenji; Sato, Kenji
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan; Wakunaga Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005027909	A1	20050331	WO 2004-JP14018	20040917
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005096306	A1	20050505	US 2004-942916	20040917
PRIORITY APPLN. INFO.:			AU 2003-905084 A	20030918

OTHER SOURCE(S): MARPAT 142:336179
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

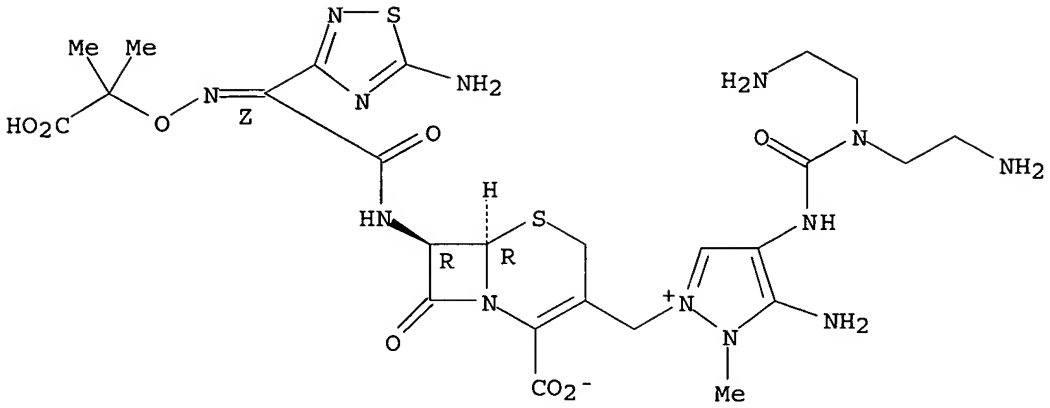
AB The present invention relates to I (R1 = lower alkyl or hydroxy (lower) alkyl, and R2 = hydrogen or amino protecting group, or R1 and R2 are bonded together and form lower alkylene ; R3 = substituted amine, amide, etc; R4 = carboxy or protected carboxy; and R5 = amino or protected amino) as potential antibacterial agents. Thus, II in N, N-dimethylformamide was treated with 1,3-bis(trimethylsilyl)urea, KI, and a protected pyrazole to five a crude solid which was treated with anisole and trifluoroacetic to give III.

IT **848769-89-1P 848769-91-5P 848769-92-6P**
848769-93-7P 848769-94-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of cephem β-lactams antibiotics as antimicrobial agents for the treatment of infectious disease)

RN 848769-89-1 HCAPLUS

CN 1H-Pyrazolium, 5-amino-2-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-4-[[[bis(2-aminoethyl)amino]carbonyl]amino]-1-methyl-, inner salt, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

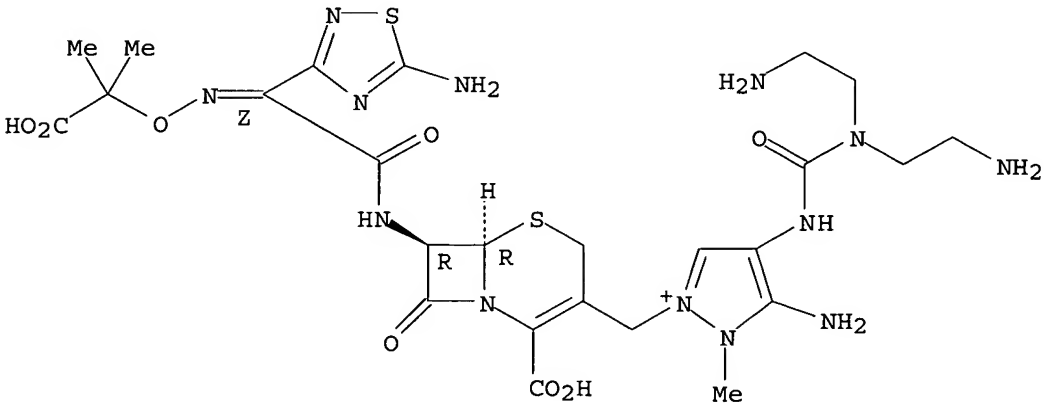


RN 848769-91-5 HCAPLUS
CN 1H-Pyrazolium, 5-amino-2-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-4-[[[bis(2-aminoethyl)amino]carbonyl]amino]-1-methyl-, rel-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

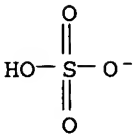
CRN 848769-90-4
CMF C25 H36 N13 O8 S2

Relative stereochemistry.
Double bond geometry as shown.



CM 2

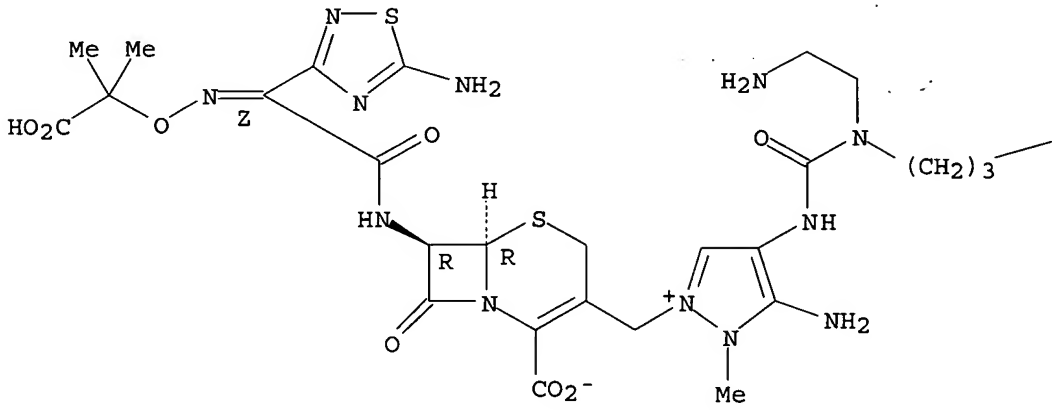
CRN 14996-02-2
CMF H O4 S



RN 848769-92-6 HCAPLUS
CN 1H-Pyrazolium, 5-amino-4-[[[(2-aminoethyl)(3-aminopropyl)amino]carbonyl]amino]-2-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methyl-, inner salt, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

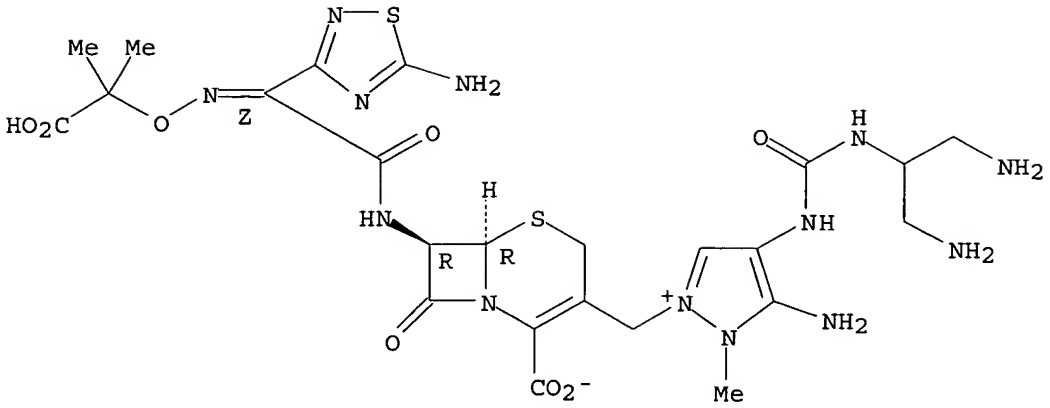
PAGE 1-A



PAGE 1-B

RN 848769-93-7 HCAPLUS
CN 1H-Pyrazolium, 5-amino-4-[[[[2-amino-1-(aminomethyl)ethyl]amino]carbonyl]amino]-2-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methyl-, inner salt, rel- (9CI) (CA INDEX NAME)

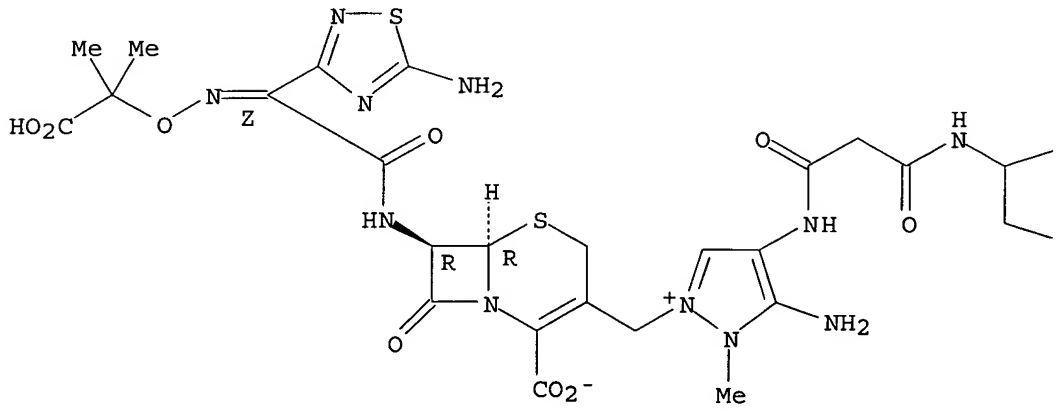
Relative stereochemistry.
Double bond geometry as shown.



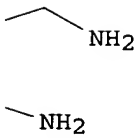
RN 848769-94-8 HCAPLUS
CN 1H-Pyrazolium, 5-amino-4-[[3-[[2-amino-1-(aminomethyl)ethyl]amino]-1,3-dioxopropyl]amino]-2-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methyl-, inner salt, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:390255 HCAPLUS
DOCUMENT NUMBER: 140:406684
TITLE: Synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compounds as antimicrobial agents
INVENTOR(S): Ohki, Hidenori; Okuda, Shinya; Yamanaka, Toshio; Ohgaki, Masaru; Toda, Ayako; Kawabata, Kohji; Inoue, Satoshi; Misumi, Keiji; Itoh, Kenji; Satoh, Kenji
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan; Wakunaga Pharmaceutical Co., Ltd.; et al.
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039814	A1	20040513	WO 2003-JP13684	20031027
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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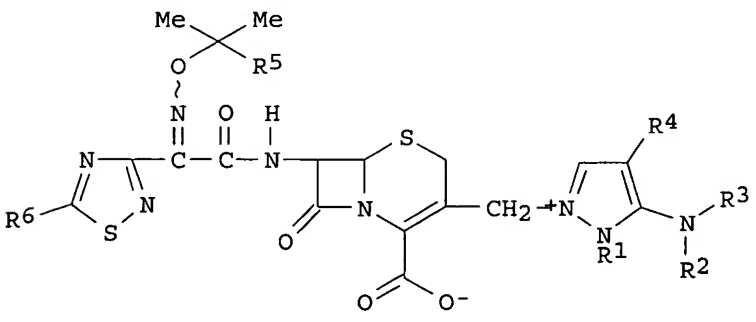
EP 1556389	A1	20050727	EP 2003-758919	20031027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015188	A	20050906	BR 2003-15188	20031027
US 2004132994	A1	20040708	US 2003-695895	20031030
PRIORITY APPLN. INFO.:			AU 2002-952355 A	20021030
			AU 2003-904813 A	20030904
			WO 2003-JP13684 W	20031027

OTHER SOURCE(S): MARPAT 140:406684
GI

This work



I

AB Cephem derivs. I [R1 = (hydroxy/halo)alkyl; R2 = H, amino protecting group; R1R2 = alkylene, alkenylene; R3 = H, alkyl; R4 = N(R7)(A)k(NH)mOn(CHR8)q(CH2)pR9, A = C:X, COCO,COCH2CO, etc., R7 = H, alkyl, amino protecting group, R8 = H, OH, R9 = amino, dialkylamino, protected amino, etc., k, m, n, q = independently 0, 1, p = 0-3, X = O, NH; R5 = carboxy, protected carboxy; R6 = amino, protected amino] were prepared to be used as antimicrobial agents. Thus, benzyhydryl 7β-[-(Z)-2-(5-tert-butoxycarbonylamino-1,2,4-thiadiazol-3-yl)-2-(1-tert-butoxycarbonyl-1-methylethoxyimino)acetamido]-3-chloromethyl-3-cephem-4-carboxylate reacted with 5-amino-4-(3-(2-[(tert-butoxycarbonyl)amino]ethyl)ureido)-1-methylpyrazole to give 7β-[(Z)-2-(5-amino-1,2,4-thiadiazol-3-yl)-2-(1-carboxy-1-methylethoxyimino)acetamido]-3-[3-amino-4-[3-(2-aminoethyl)ureido]-2-methyl-1-pyrazolio]methyl-3-cephem-4-carboxylate. The prepared cephems were tested in vitro for antibacterial activity against Pseudomonas aeruginosa FP 1380.

IT **689293-85-4P 689293-96-7P**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antimicrobial; synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compds. as antimicrobial agents)

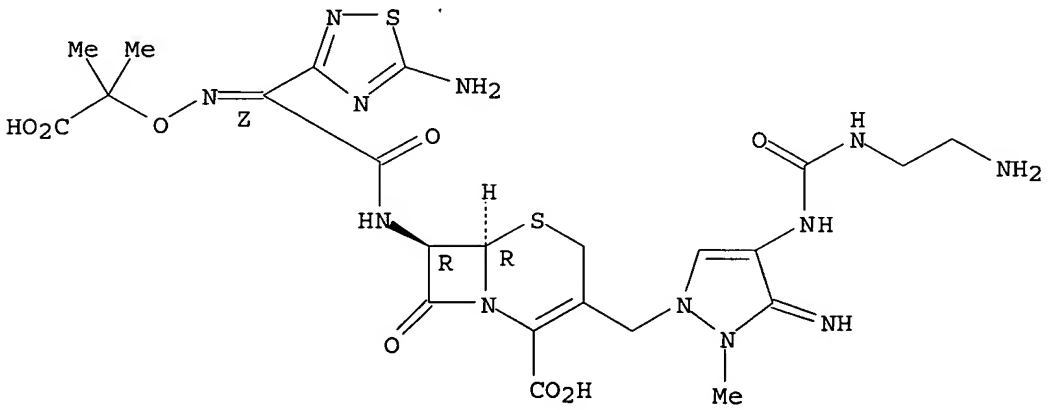
RN 689293-85-4 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(2-aminoethyl)amino]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 689293-68-3
CMF C23 H30 N12 O8 S2

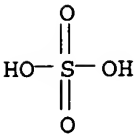
Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9

CMF H2 O4 S

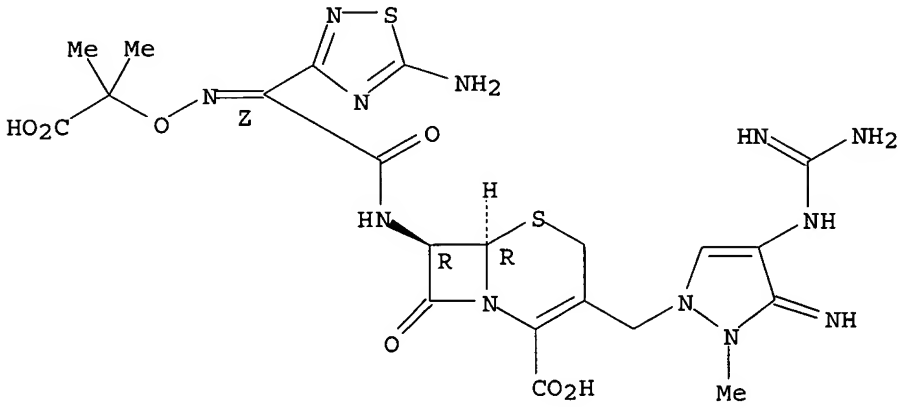


RN 689293-96-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoiminomethyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

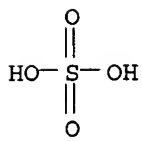
CRN 689293-80-9
CMF C21 H26 N12 O7 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9
CMF H2 O4 S

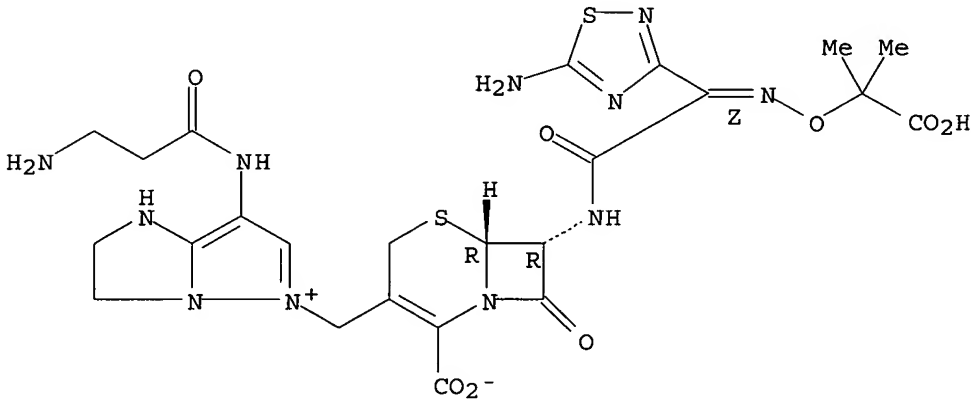


IT **689293-74-1P 689293-77-4P 689293-84-3P**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)
(product; synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compds. as antimicrobial agents)

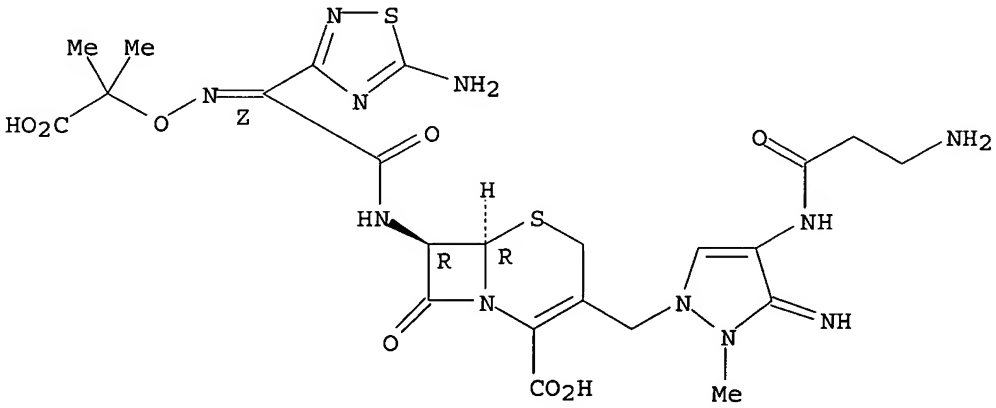
RN 689293-74-1 HCAPLUS
CN 1H-Imidazo[1,2-b]pyrazolium, 7-[(3-amino-1-oxopropyl)amino]-5-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-2,3-dihydro-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689293-77-4 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-amino-1-oxopropyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



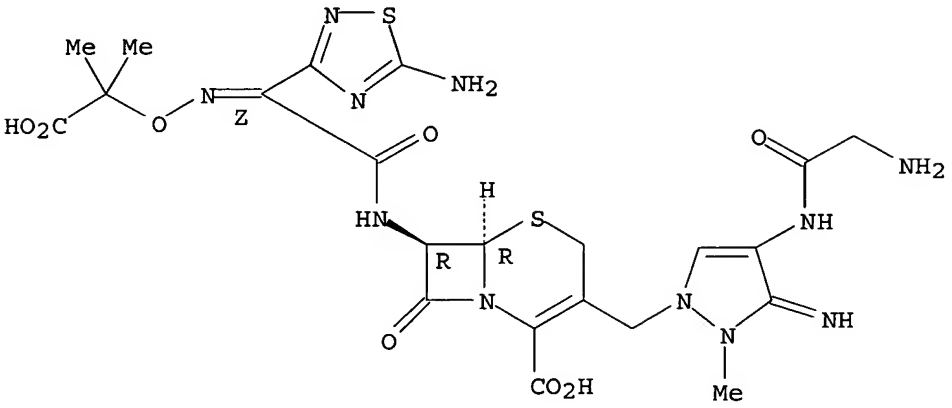
RN 689293-84-3 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoacetyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-

methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

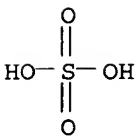
CRN 689293-83-2
CMF C22 H27 N11 O8 S2

Absolute stereochemistry.
Double bond geometry as shown.



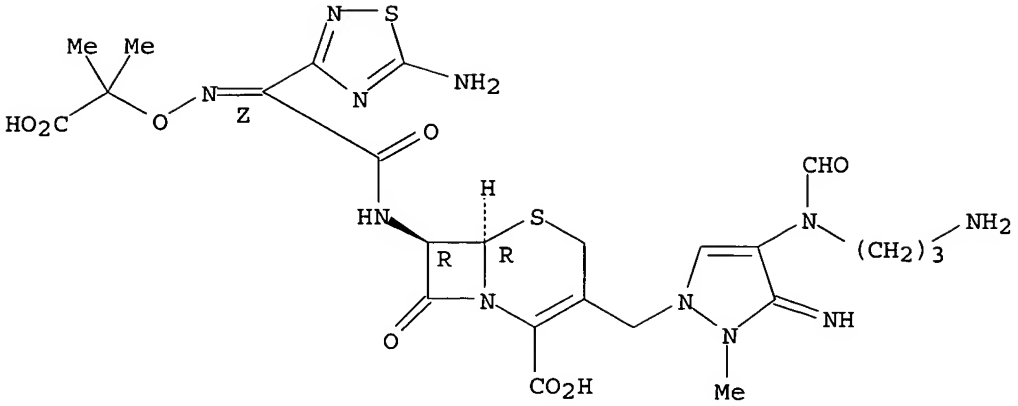
CM 2

CRN 7664-93-9
CMF H2 O4 S



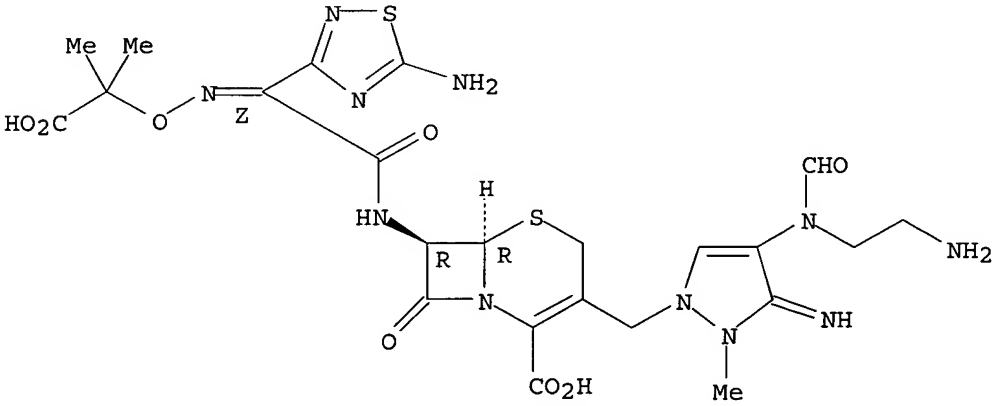
IT **689294-34-6P 689294-37-9P 689295-10-1P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(product; synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compds. as antimicrobial agents)
RN 689294-34-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-aminopropyl)formylamino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



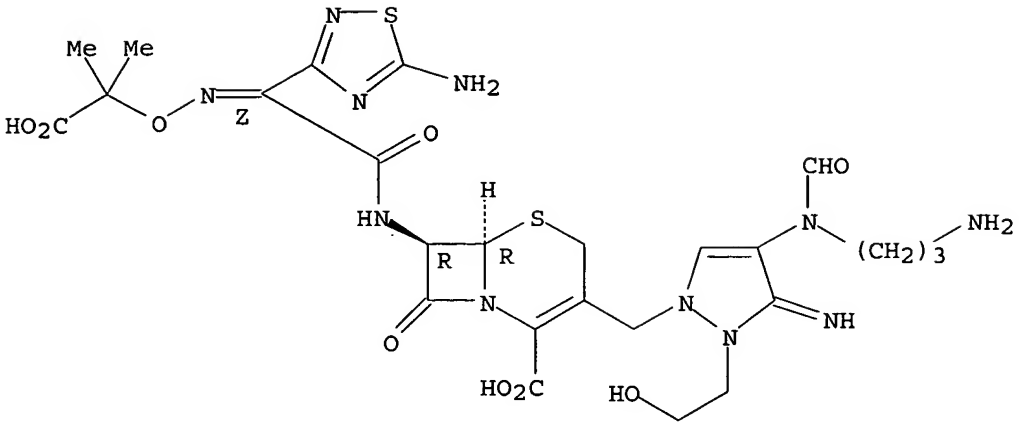
RN 689294-37-9 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(2-aminoethyl)formylamino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689295-10-1 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-aminopropyl)formylamino]-2,3-dihydro-2-(2-hydroxyethyl)-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

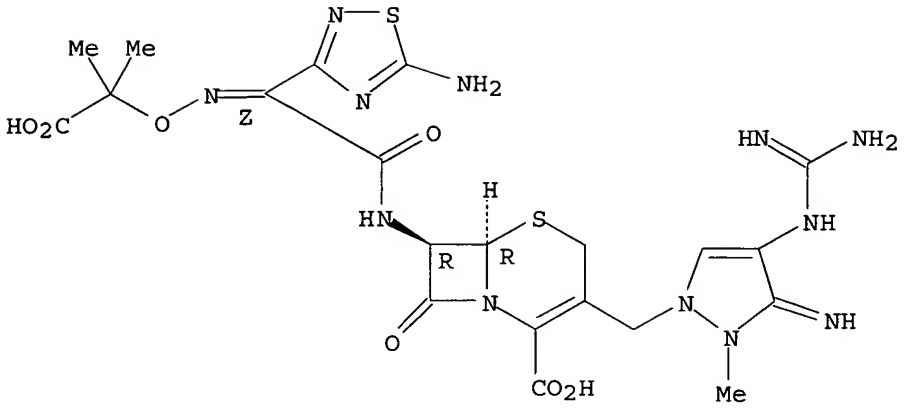


IT **689293-80-9P 689293-89-8P 689293-92-3P**
689293-95-6P 689293-98-9P 689294-01-7P
689294-03-9P 689294-05-1P 689294-08-4P
689294-10-8P 689294-12-0P 689294-14-2P
689294-16-4P 689294-18-6P 689294-20-0P
689294-22-2P 689294-24-4P 689294-30-2P
689294-35-7P 689294-38-0P 689294-42-6P
689294-46-0P 689294-48-2P 689294-50-6P
689294-52-8P 689294-54-0P 689294-56-2P
689294-58-4P 689294-62-0P 689294-64-2P
689294-66-4P 689294-69-7P 689294-72-2P
689294-75-5P 689294-77-7P 689294-80-2P
689294-83-5P 689294-86-8P 689294-91-5P
689294-92-6P 689294-97-1P 689295-02-1P
689295-12-3P 689295-17-8P 689295-30-5P
689295-37-2P 689295-39-4P 689295-40-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(product; synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compds. as antimicrobial agents)

RN 689293-80-9 HCAPLUS

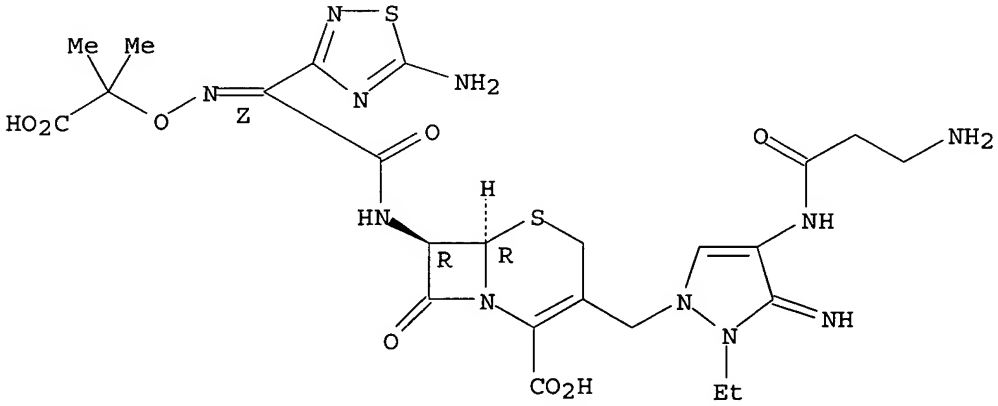
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoiminomethyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



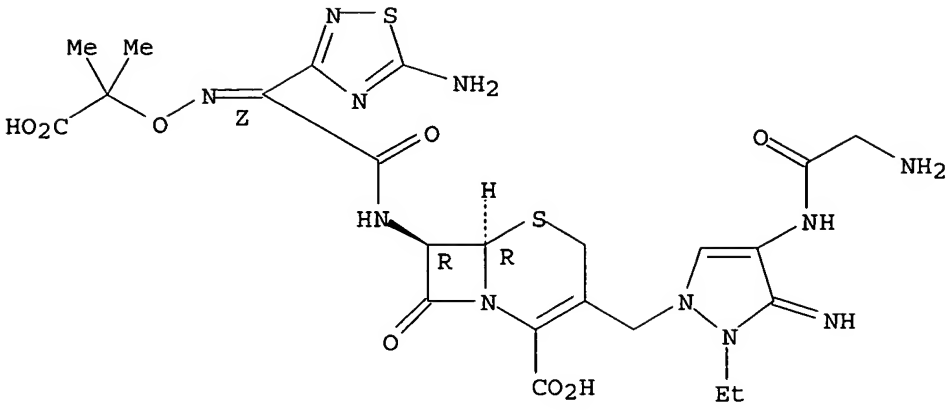
RN 689293-89-8 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-amino-1-oxopropyl)amino]-2-ethyl-2,3-dihydro-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



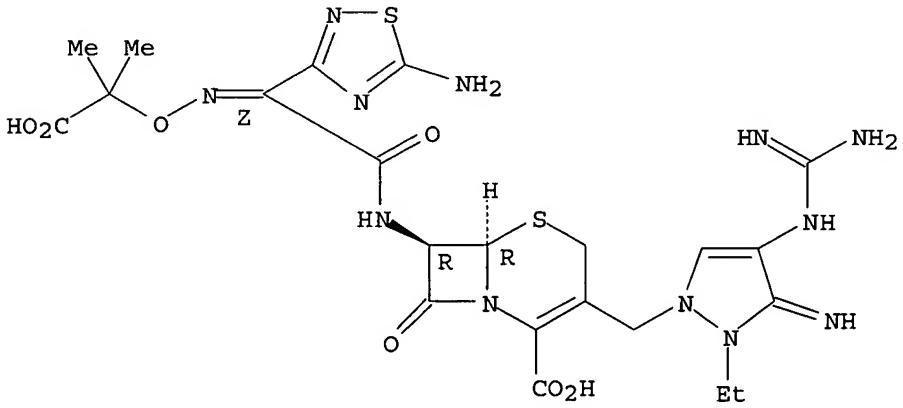
RN 689293-92-3 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoacetyl)amino]-2-ethyl-2,3-dihydro-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



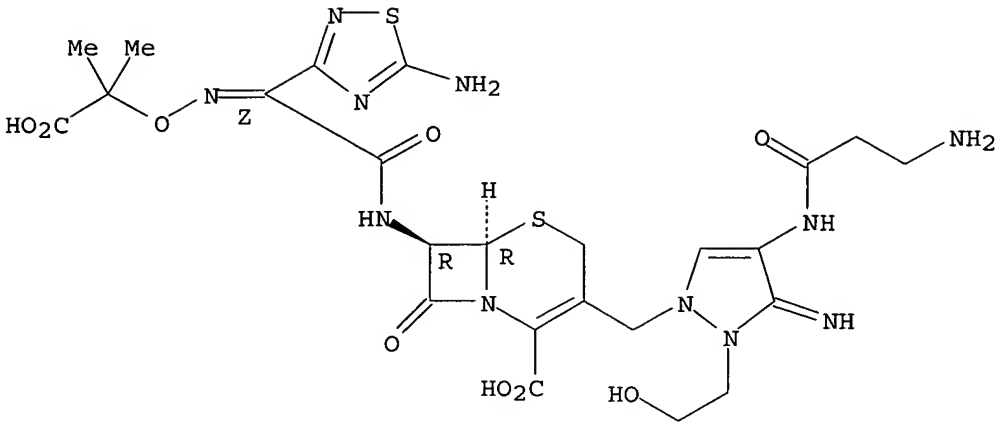
RN 689293-95-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoiminomethyl)amino]-2-ethyl-2,3-dihydro-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



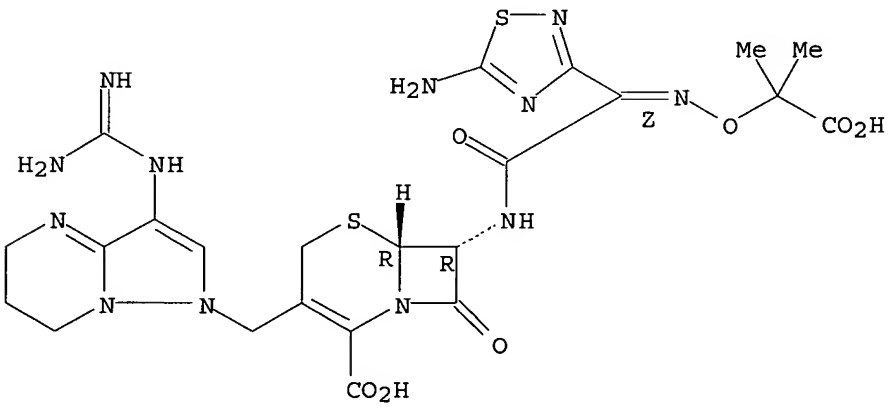
RN 689293-98-9 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-amino-1-oxopropyl)amino]-2,3-dihydro-2-(2-hydroxyethyl)-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



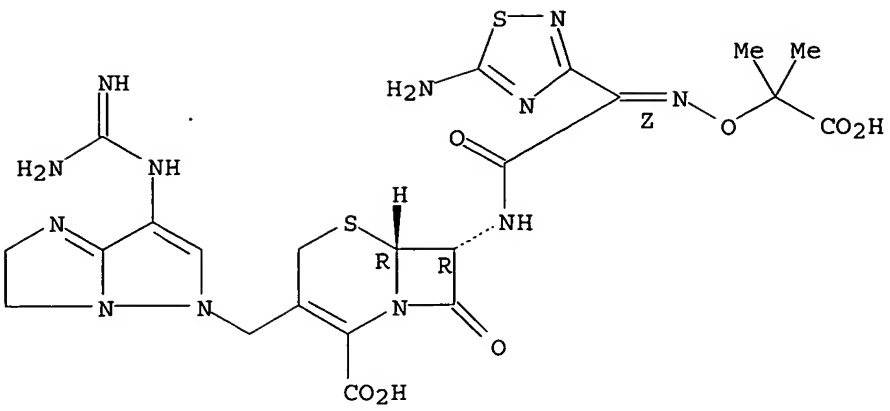
RN 689294-01-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[3-[(aminoiminomethyl)amino]-6,7-dihydropyrazolo[1,5-a]pyrimidin-1(5H)-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



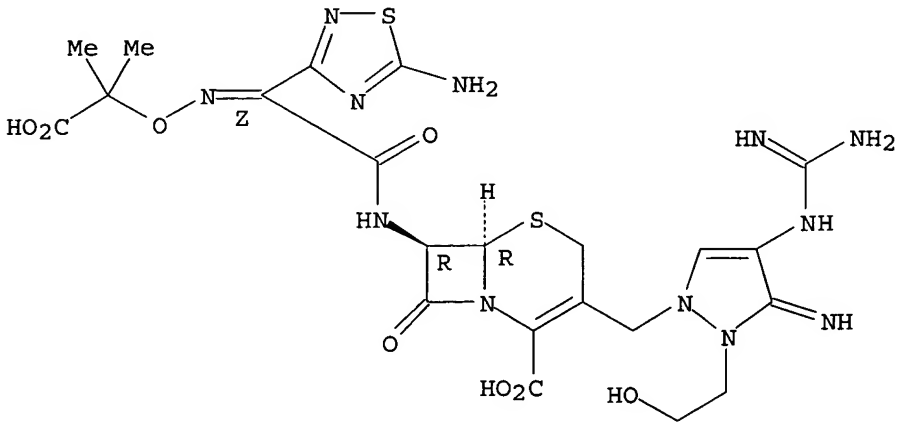
RN 689294-03-9 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[7-[(aminoiminomethyl)amino]-2,3-dihydro-5H-imidazo[1,2-b]pyrazol-5-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-05-1 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoiminomethyl)amino]-2,3-dihydro-2-(2-hydroxyethyl)-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

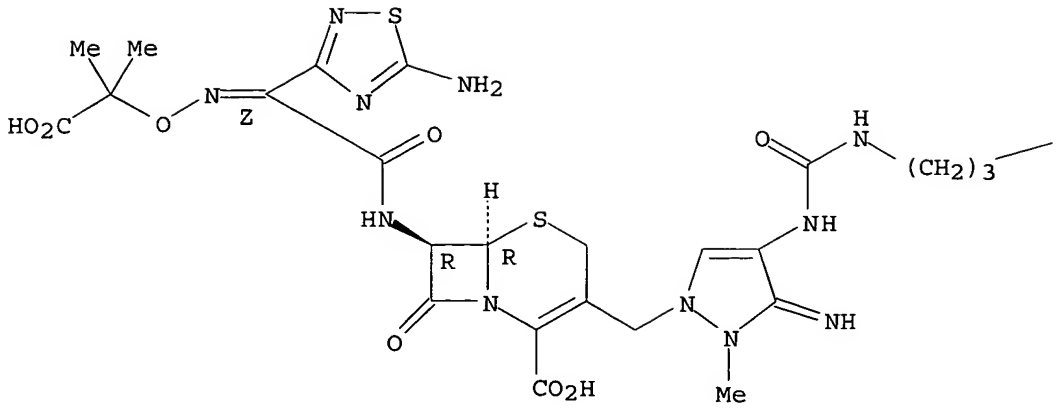
Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-08-4 HCAPLUS
CN 5-Thïa-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(3-aminopropyl)amino]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

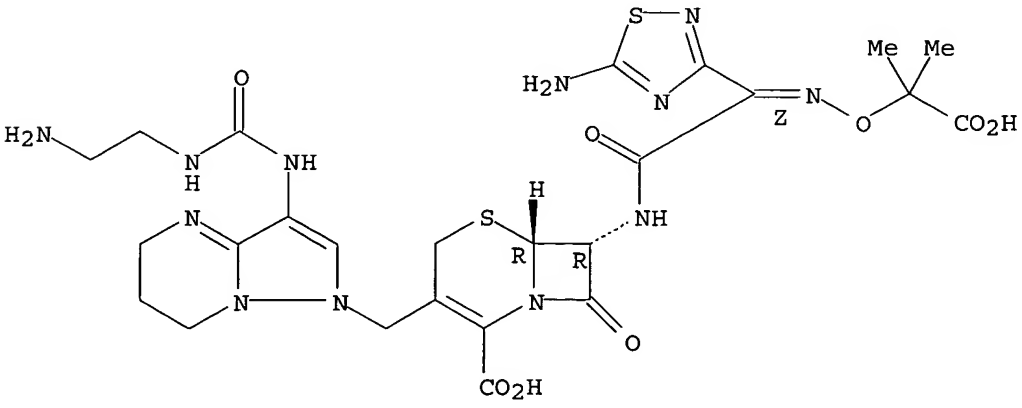


PAGE 1-B

—NH_2

RN 689294-10-8 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[3-[[[(2-aminoethyl)amino]carbonyl]amino]-6,7-dihydropyrazolo[1,5-a]pyrimidin-1(5H)-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

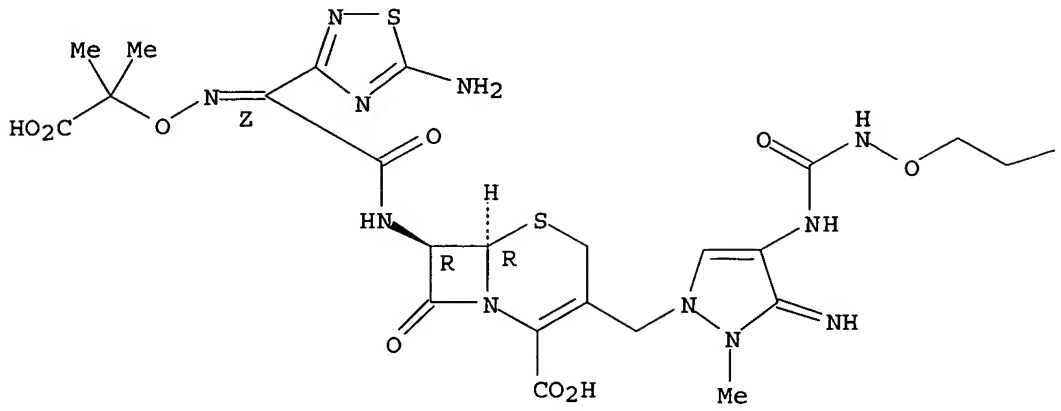


RN 689294-12-0 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(2-aminoethoxy)amino]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

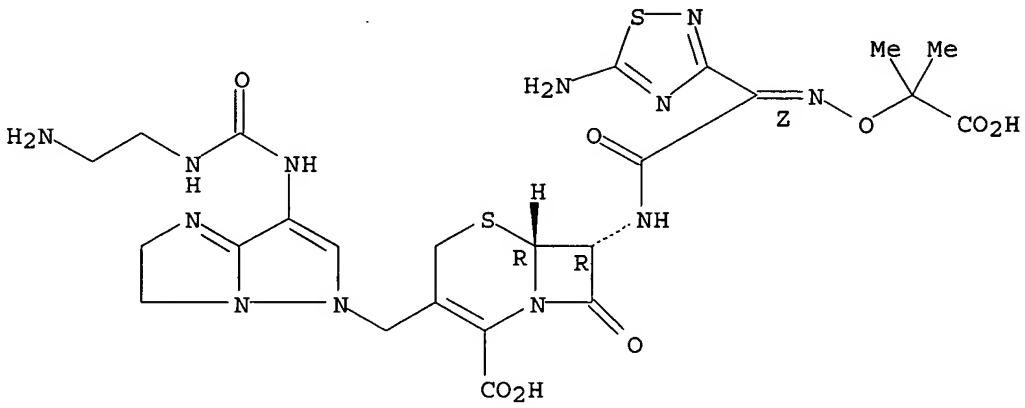


PAGE 1-B

—NH_2

RN 689294-14-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[7-[[[(2-aminoethyl)amino]carbonyl]amino]-2,3-dihydro-5H-imidazo[1,2-b]pyrazol-5-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

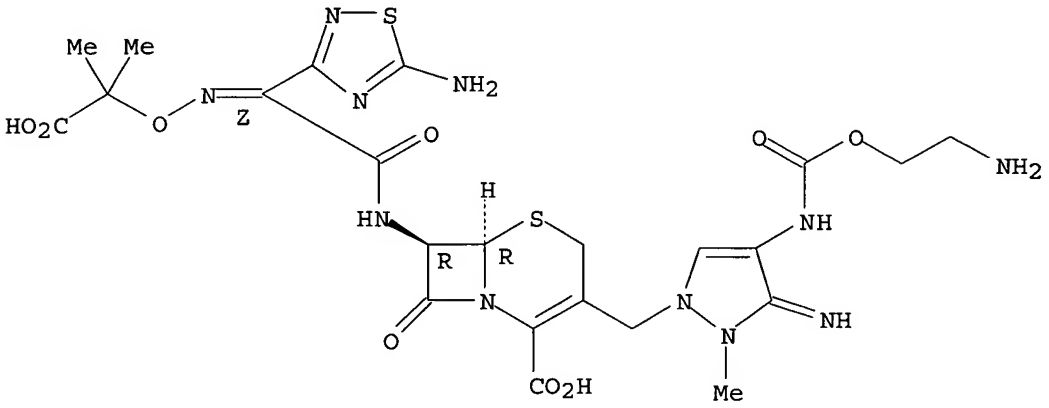
Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-16-4 HCAPLUS

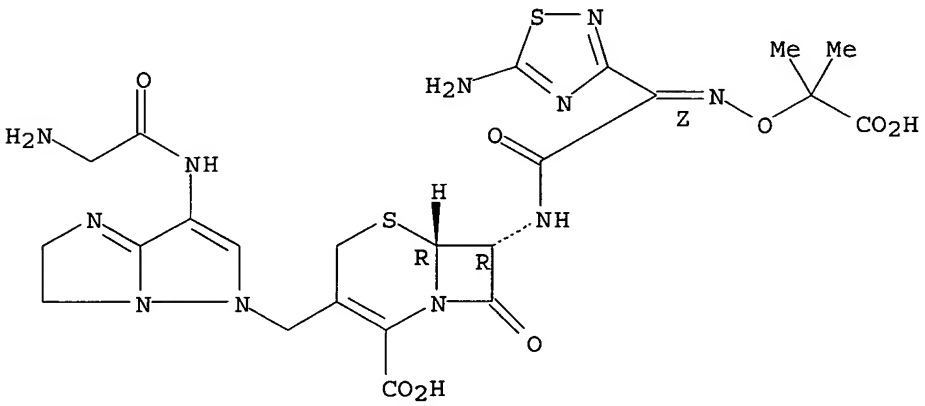
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[(2-aminoethoxy)carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



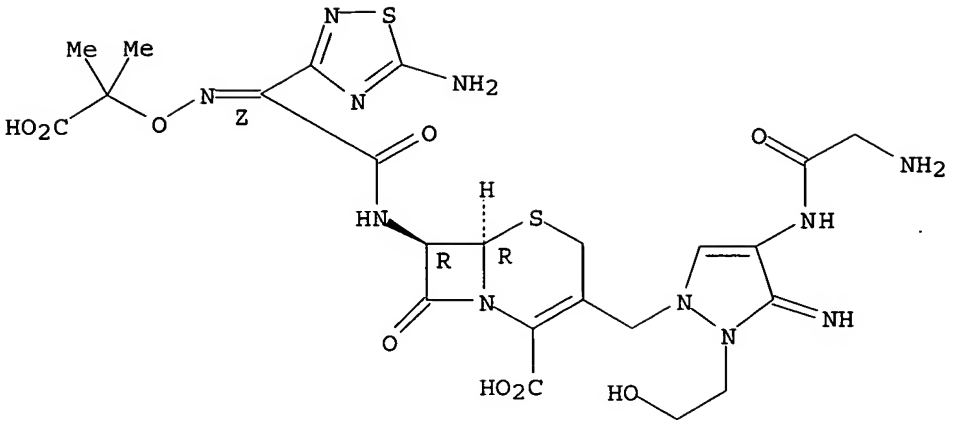
RN 689294-18-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[7-[(aminoacetyl)amino]-2,3-dihydro-5H-imidazo[1,2-b]pyrazol-5-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



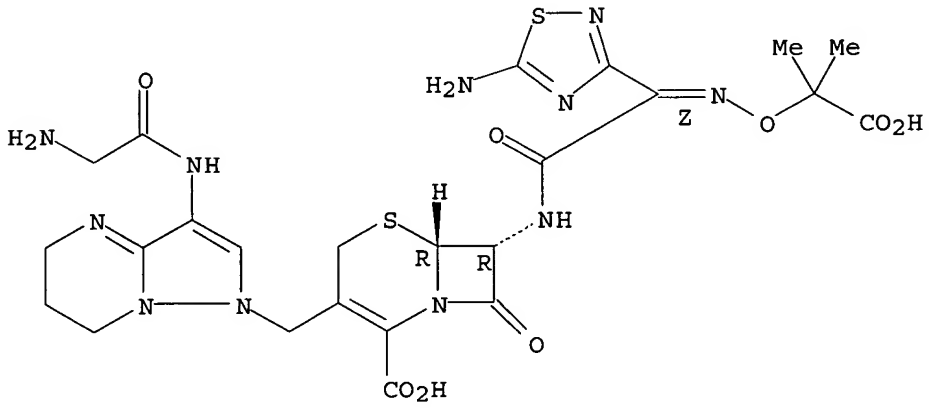
RN 689294-20-0 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminoacetyl)amino]-2,3-dihydro-2-(2-hydroxyethyl)-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



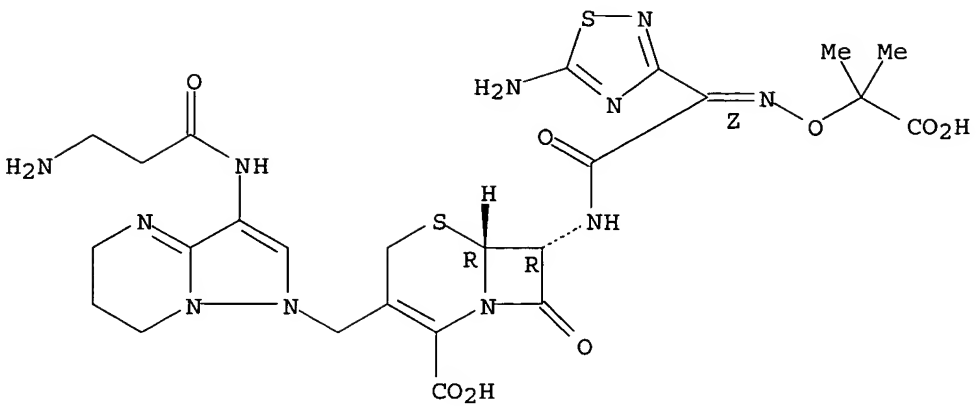
RN 689294-22-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[3-[(aminoacetyl)amino]-6,7-dihydropyrazolo[1,5-a]pyrimidin-1(5H)-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-24-4 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[3-[(3-amino-1-oxopropyl)amino]-6,7-dihydropyrazolo[1,5-a]pyrimidin-1(5H)-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

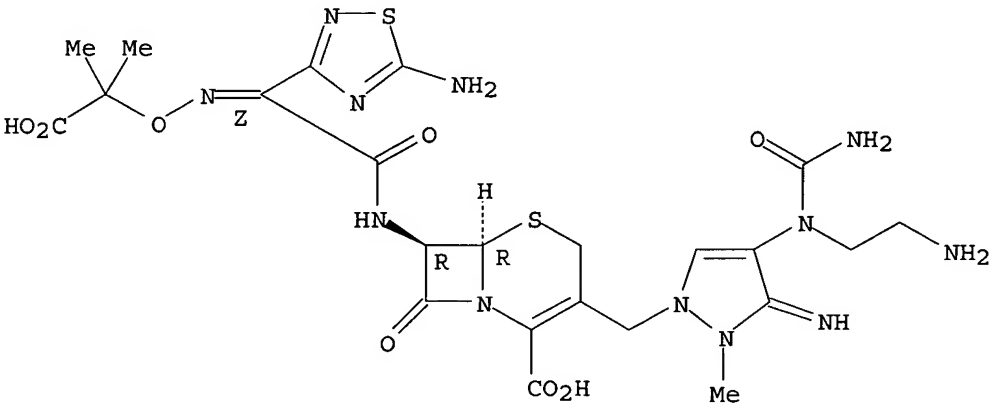


RN 689294-30-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(aminocarbonyl)(2-aminoethyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

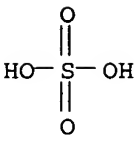
CRN 689294-29-9
CMF C23 H30 N12 O8 S2

Absolute stereochemistry.
Double bond geometry as shown.



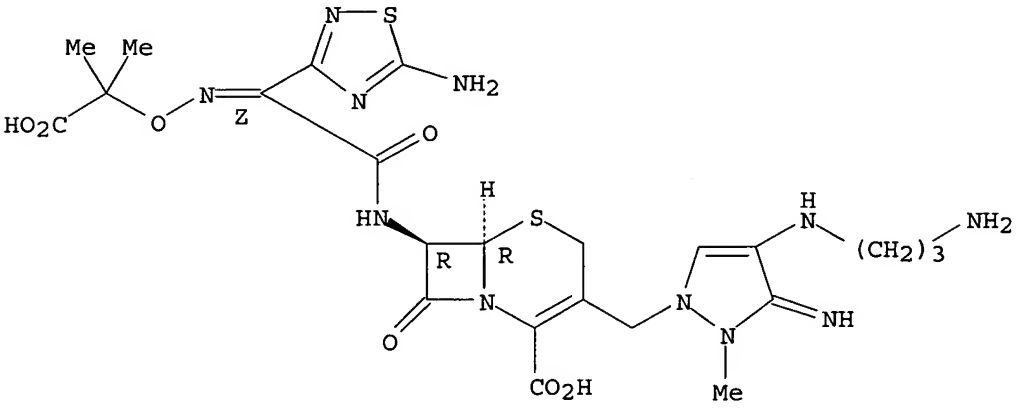
CM 2

CRN 7664-93-9
CMF H2 O4 S



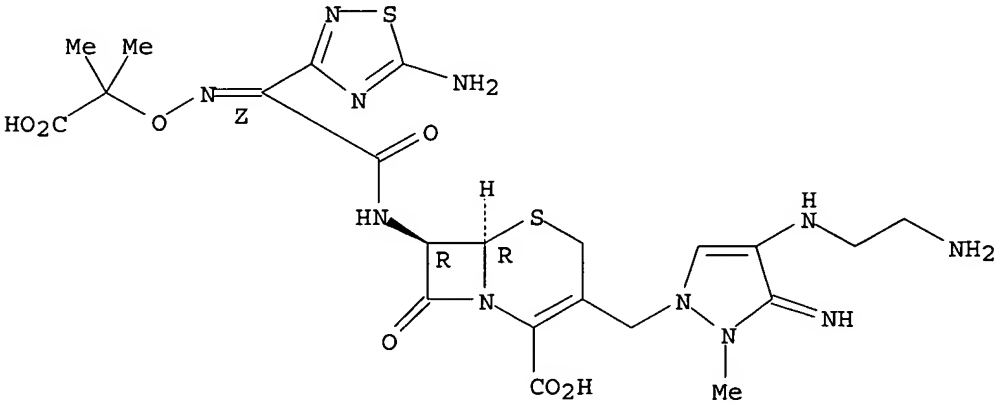
RN 689294-35-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-aminopropyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-38-0 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(2-aminoethyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

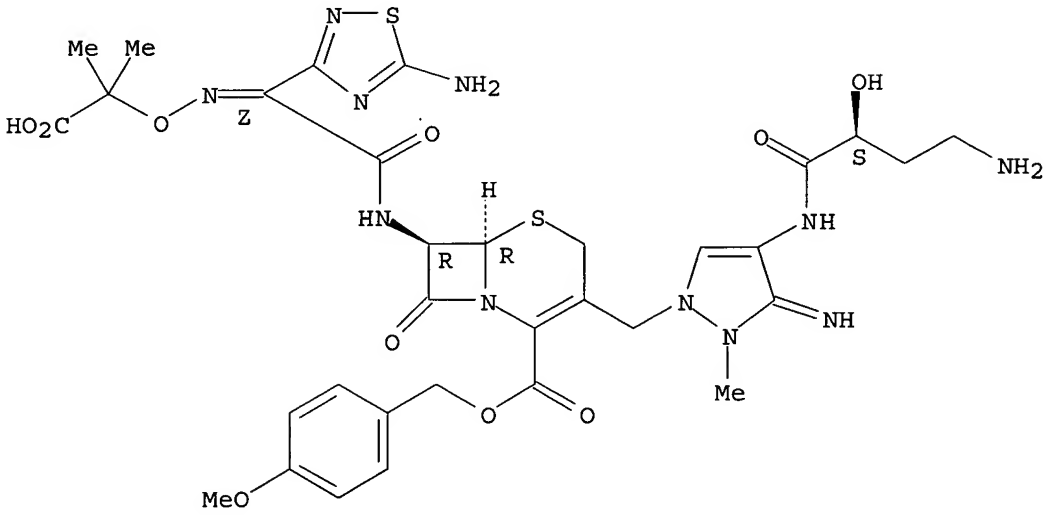


RN 689294-42-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[(2S)-4-amino-2-hydroxy-1-oxobutyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, 2-[(4-methoxyphenyl)methyl] ester, (6R,7R)-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

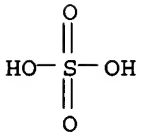
CRN 689294-41-5
CMF C32 H39 N11 O10 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 689294-46-0 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[2-[(2-aminoethyl)amino]-3,4-dioxo-1-cyclobuten-1-yl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

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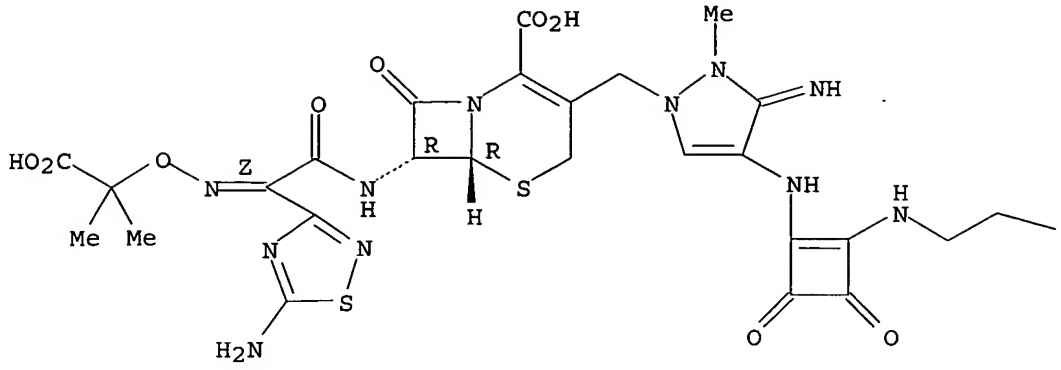

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RN 689294-48-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[2-[(3-aminopropyl)amino]-3,4-dioxo-1-cyclobuten-1-yl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, trihydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

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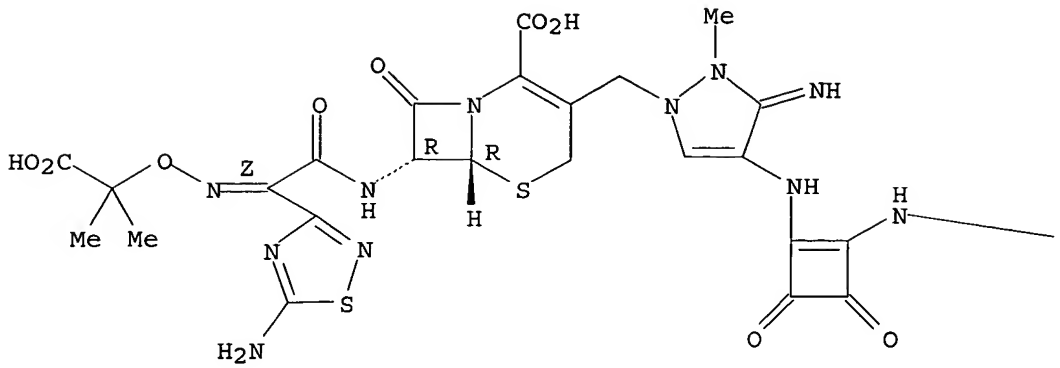

● 3 HCl

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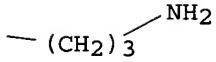

RN 689294-50-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(2-aminoethyl)amino]oxoacetyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

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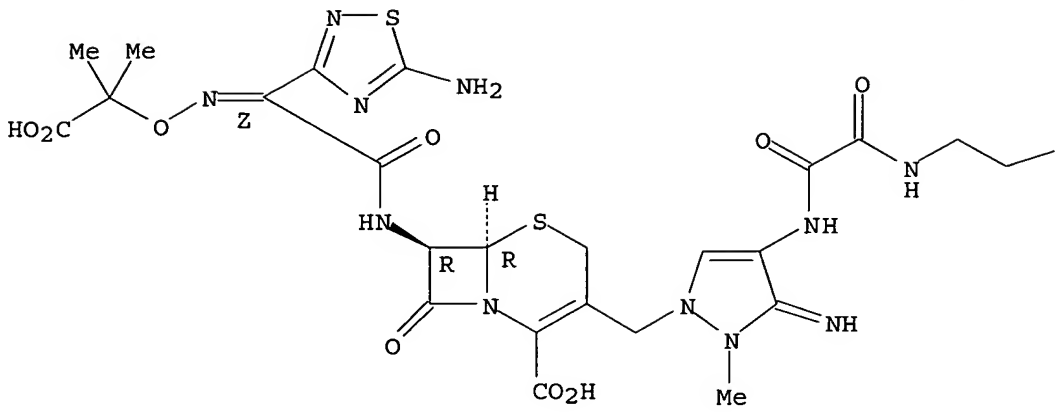

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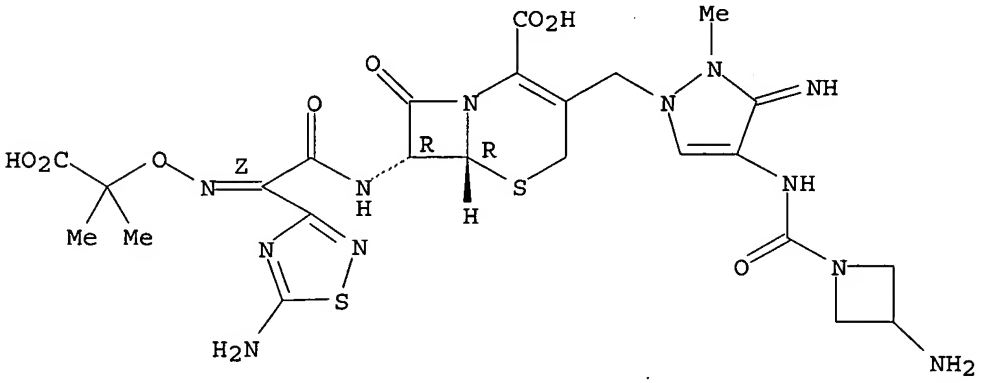
—NH_2

RN 689294-52-8 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[(3-amino-1-azetidinyl)carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, trihydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

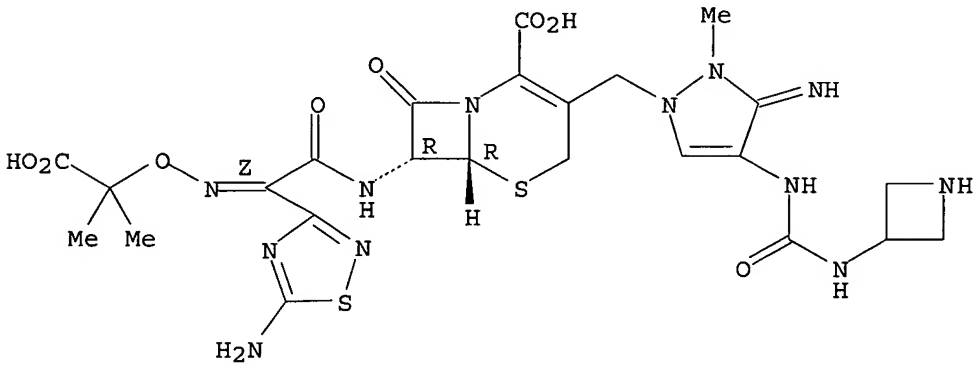


●3 HCl

RN 689294-54-0 HCAPLUS

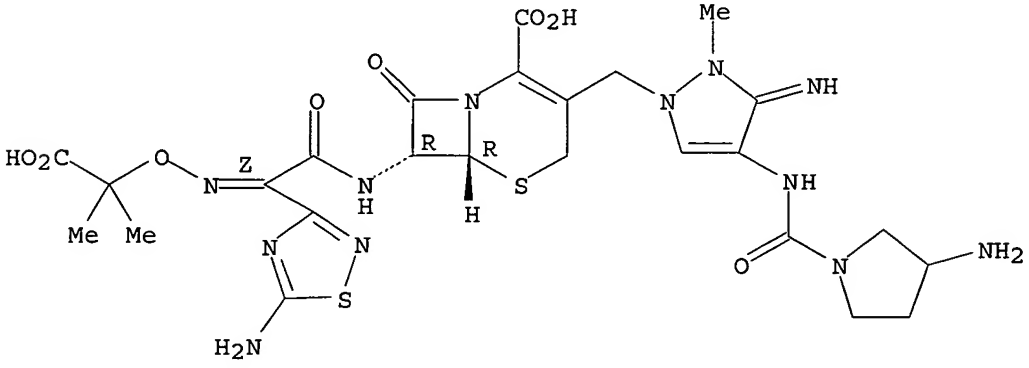
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[4-[[(3-azetidinylamino)carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-56-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[(3-amino-1-pyrrolidinyl)carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, trihydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

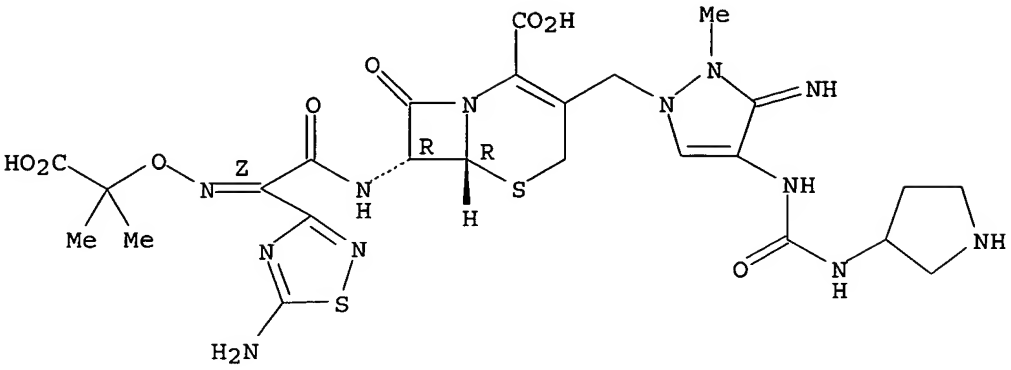
Absolute stereochemistry.
Double bond geometry as shown.



●3 HCl

RN 689294-58-4 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[[(3-pyrrolidinylamino)carbonyl]amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-62-0 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[[2-[(aminoiminomethyl)amino]ethyl]amino]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

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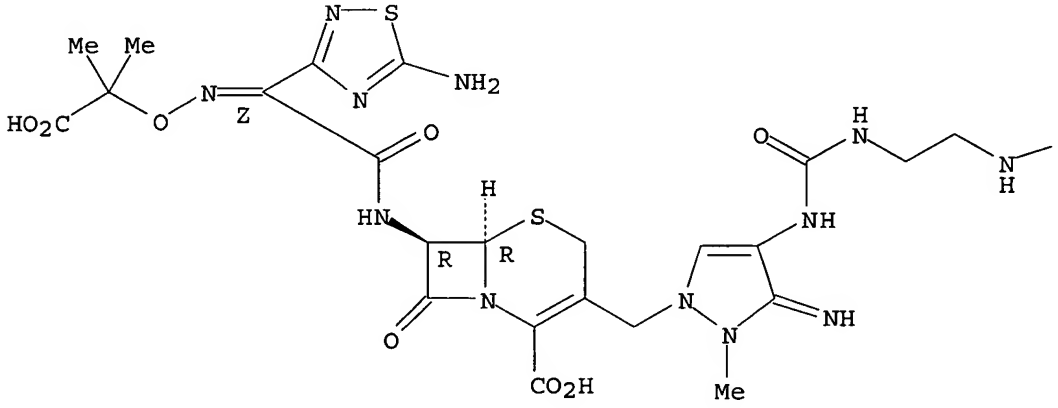

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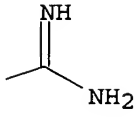
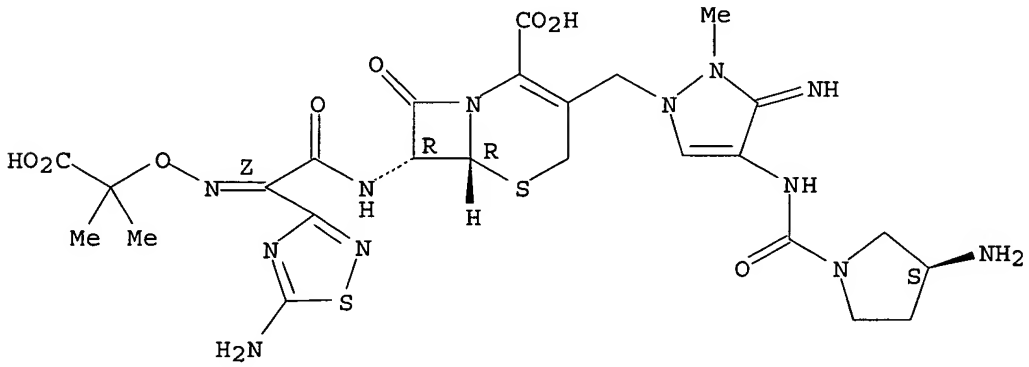


RN 689294-64-2 HCAPLUS

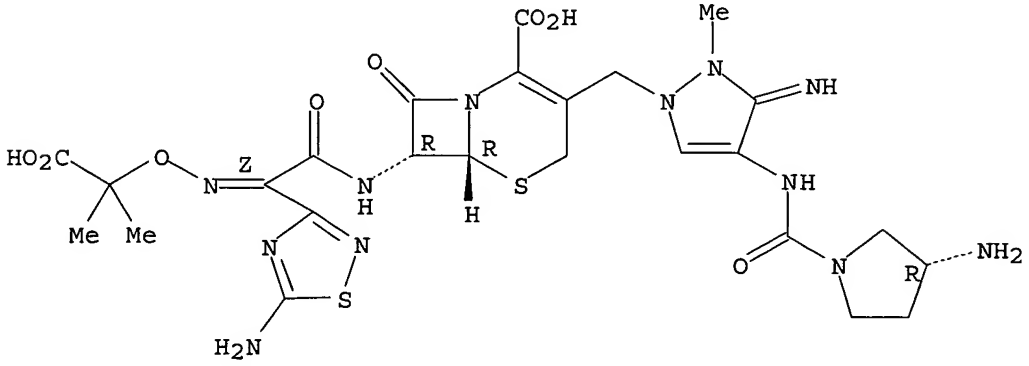
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(3S)-3-amino-1-pyrrolidinyl]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



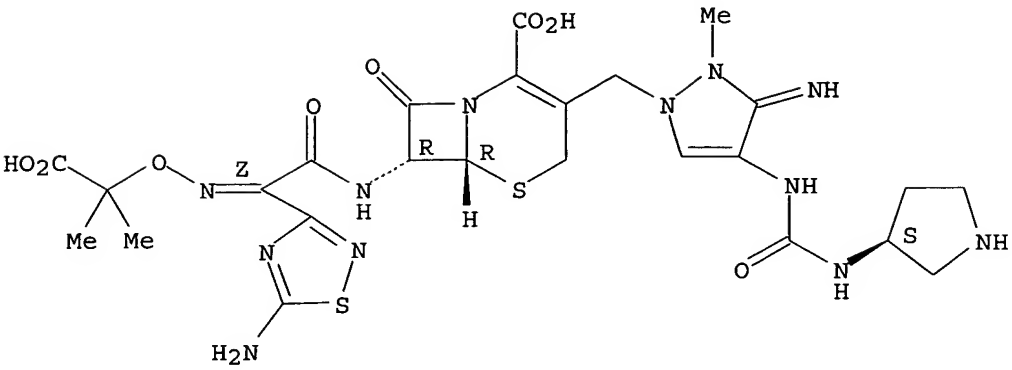
RN 689294-66-4 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(3R)-3-amino-1-pyrrolidinyl]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-69-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[[[(3S)-3-pyrrolidinylamino]carbonyl]amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

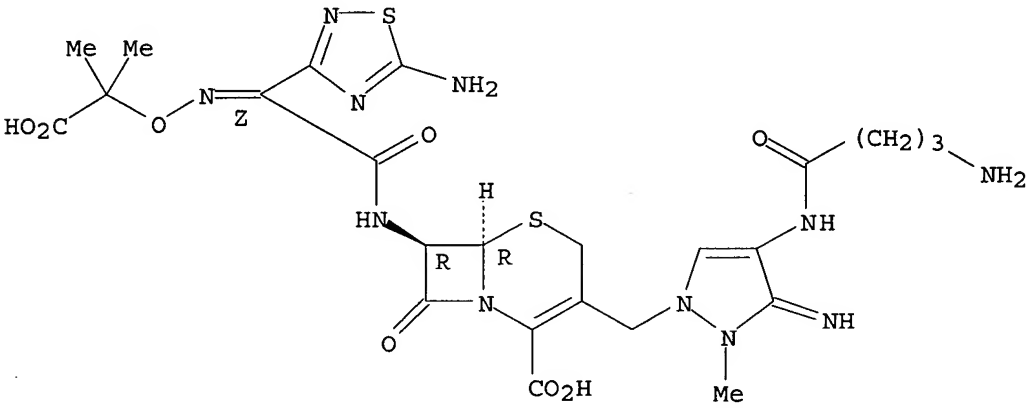


RN 689294-72-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(4-amino-1-oxobutyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

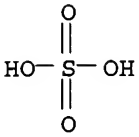
CRN 689294-71-1
CMF C24 H31 N11 O8 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9
CMF H2 O4 S

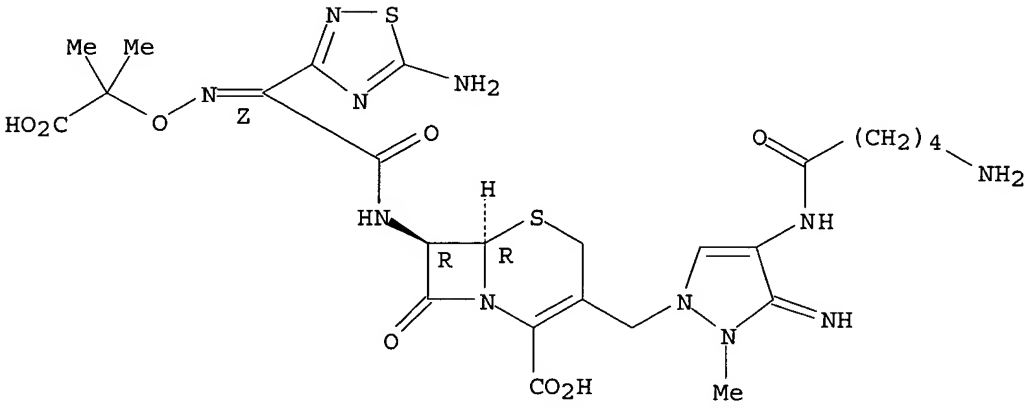


RN 689294-75-5 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(5-amino-1-oxopentyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

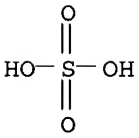
CRN 689294-74-4
CMF C25 H33 N11 O8 S2

Absolute stereochemistry.
Double bond geometry as shown.



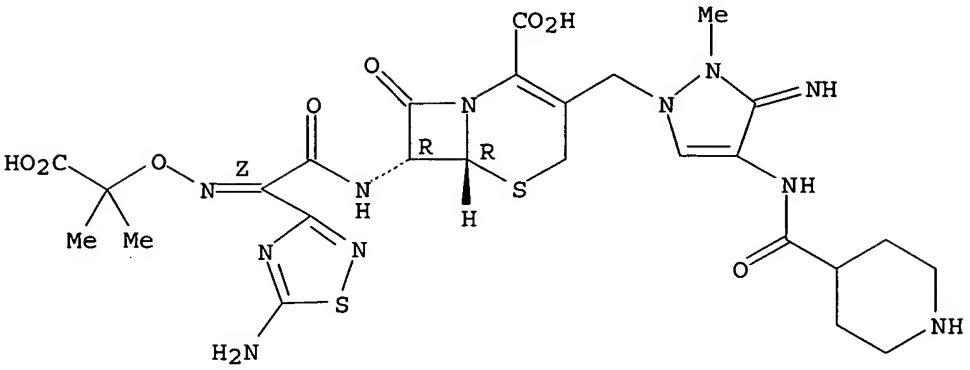
CM 2

CRN 7664-93-9
CMF H2 O4 S



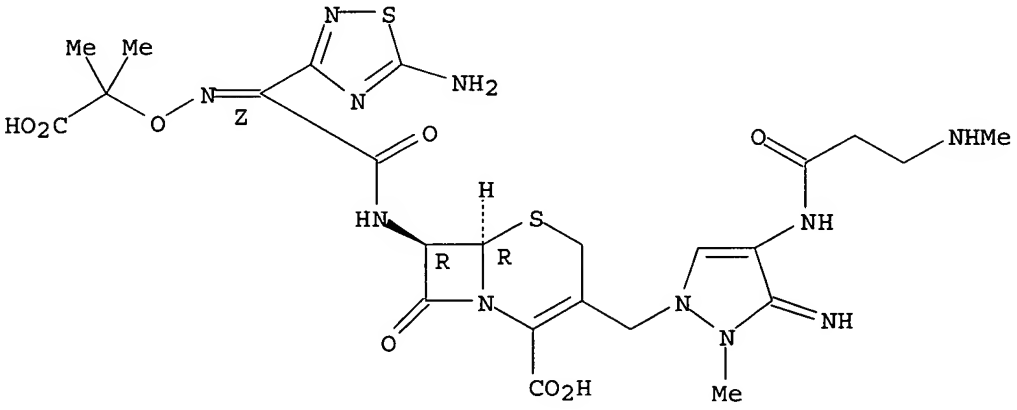
RN 689294-77-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[(4-piperidinylcarbonyl)amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



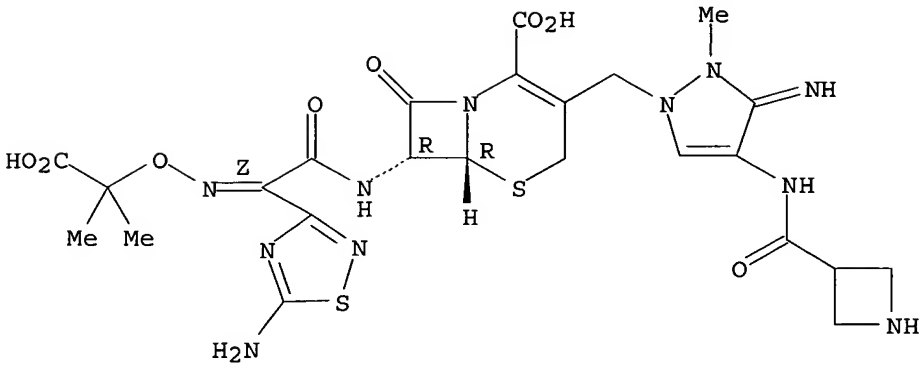
RN 689294-80-2 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[[3-(methylamino)-1-oxopropyl]amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



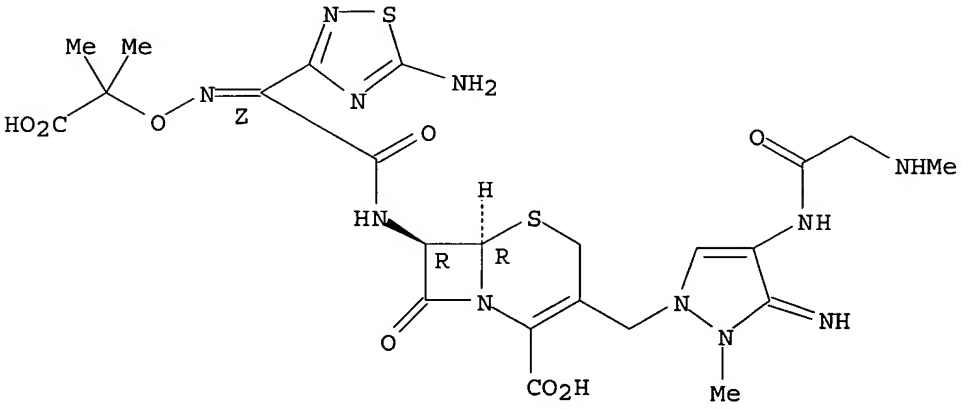
RN 689294-83-5 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[4-[(3-azetidinylcarbonyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



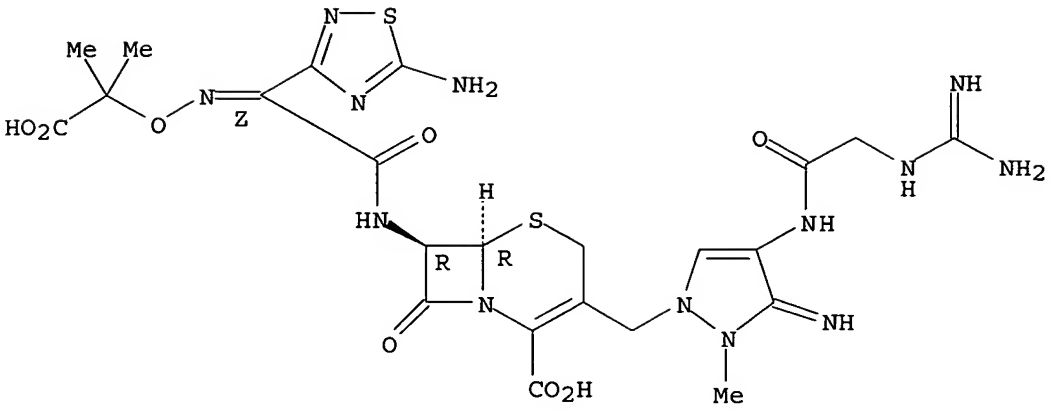
RN 689294-86-8 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[[(methylamino)acetyl]amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-91-5 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(aminoiminomethyl)amino]acetyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

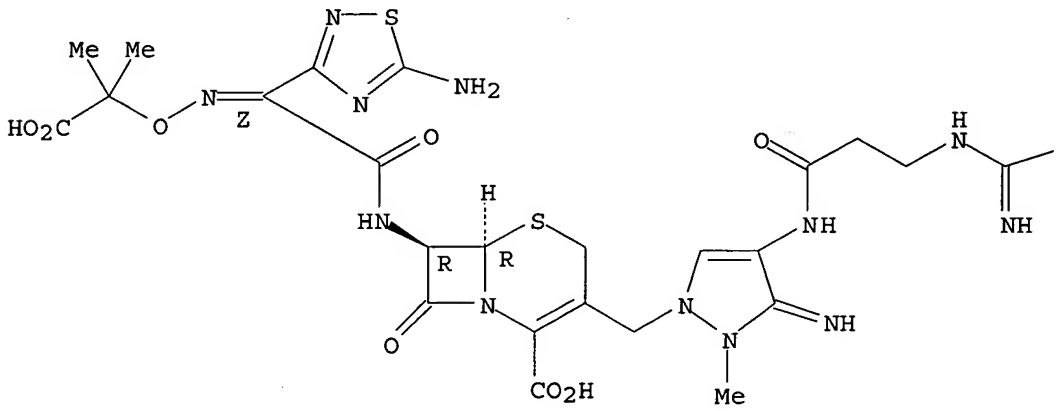
Absolute stereochemistry.
Double bond geometry as shown.



RN 689294-92-6 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[3-[(aminoiminomethyl)amino]-1-oxopropyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



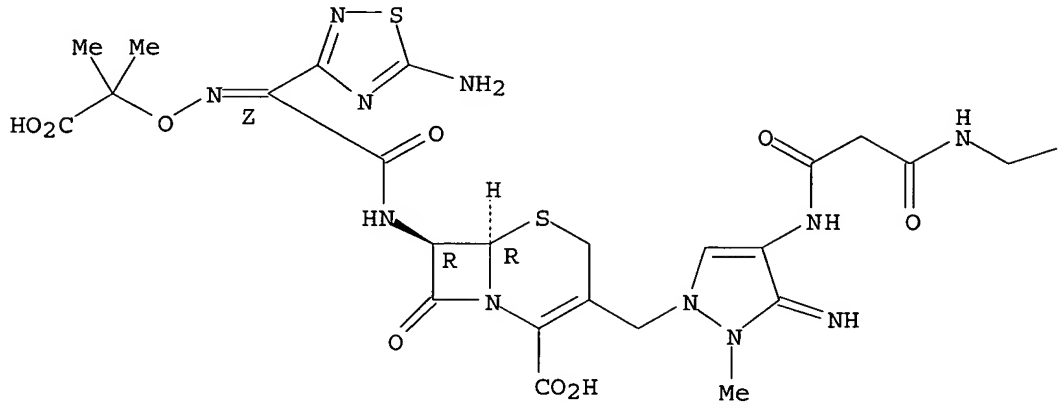
PAGE 1-B

RN 689294-97-1 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[3-[(2-aminoethyl)amino]-1,3-dioxopropyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-

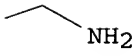
yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

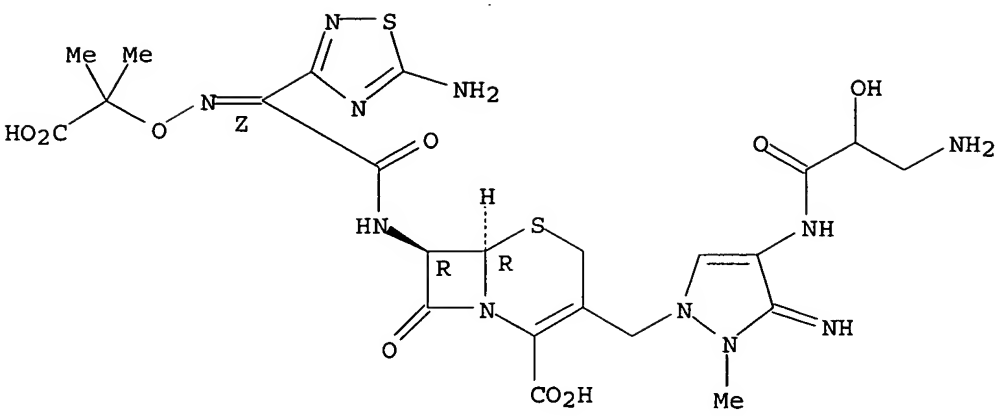


PAGE 1-B



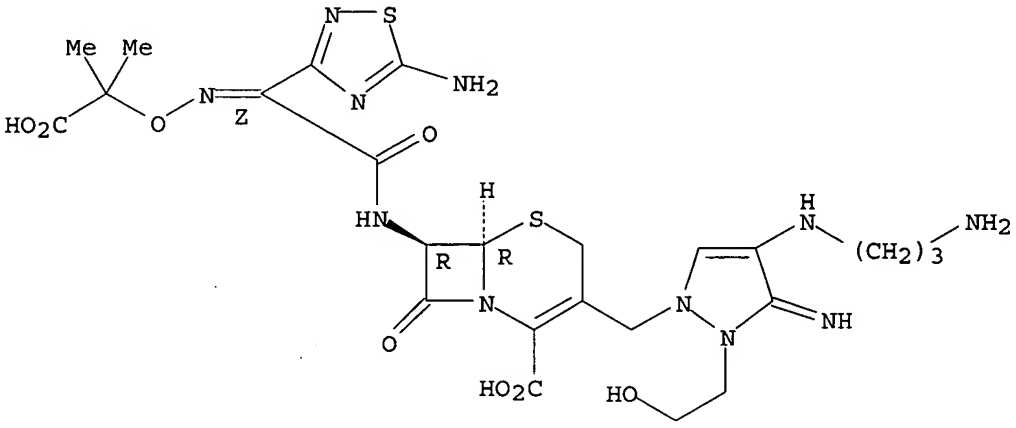
RN 689295-02-1 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-amino-2-hydroxy-1-oxopropyl)amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



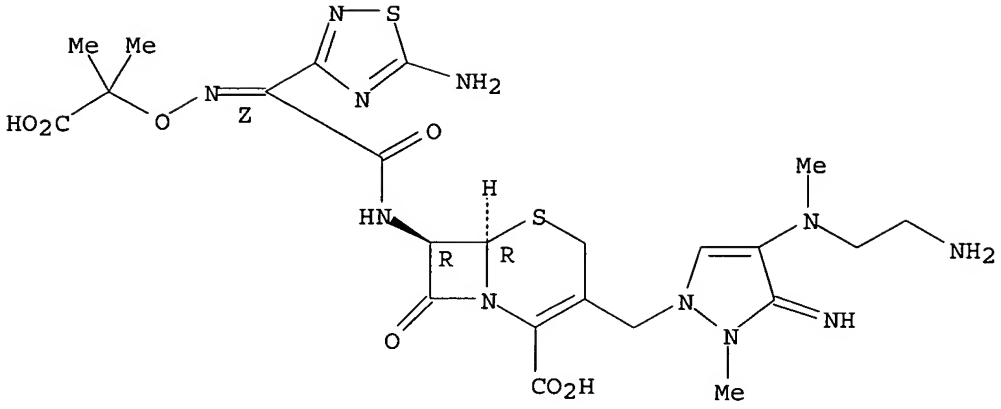
RN 689295-12-3 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-aminopropyl)amino]-2,3-dihydro-2-(2-hydroxyethyl)-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



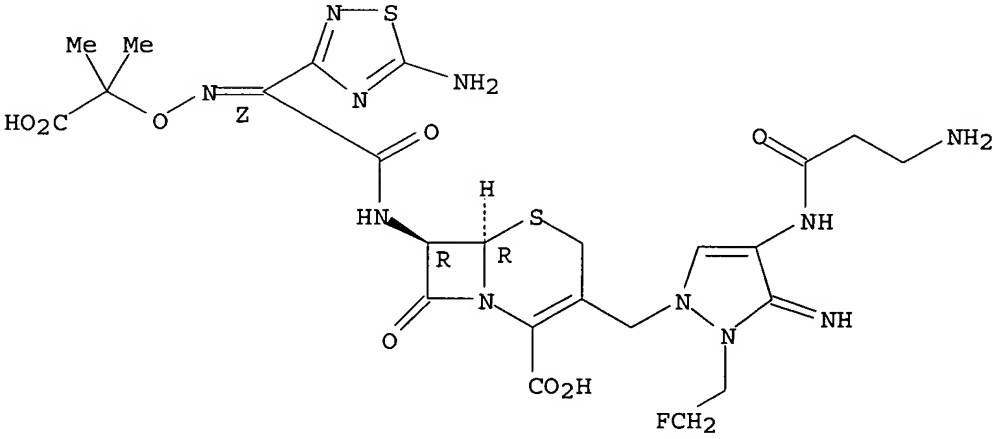
RN 689295-17-8 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(2-aminoethyl)methylamino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



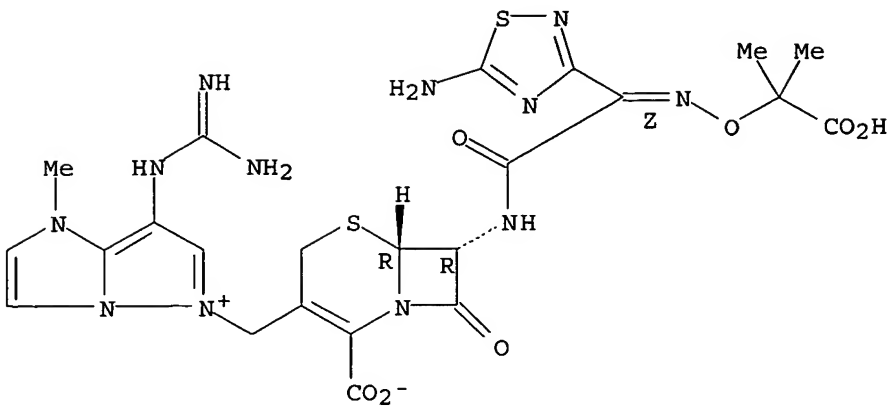
RN 689295-30-5 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[(3-amino-1-oxopropyl)amino]-2-(2-fluoroethyl)-2,3-dihydro-3-imino-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



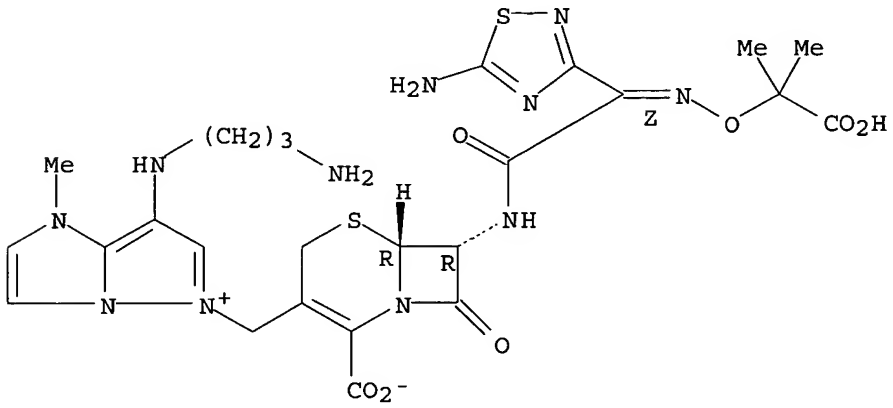
RN 689295-37-2 HCAPLUS
CN 1H-Imidazo[1,2-b]pyrazolium, 7-[(aminoiminomethyl)amino]-5-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 689295-39-4 HCAPLUS
CN 1H-Imidazo[1,2-b]pyrazolium, 7-[(3-aminopropyl)amino]-5-[[(6R,7R)-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

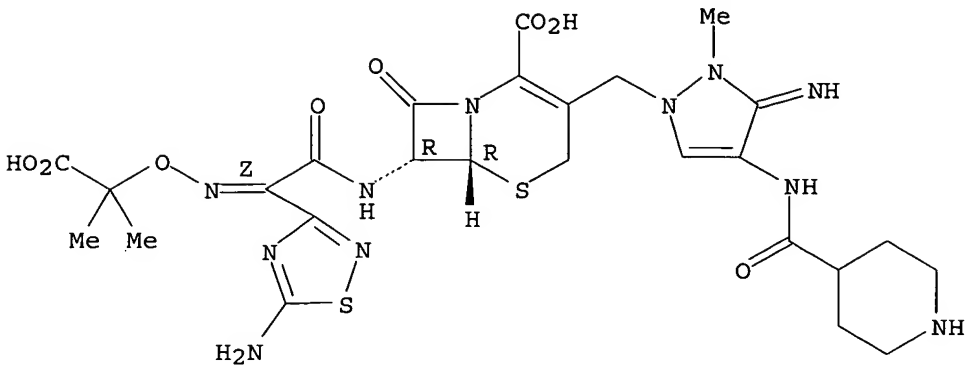


RN 689295-40-7 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydro-3-imino-2-methyl-4-[(4-piperidinylcarbonyl)amino]-1H-pyrazol-1-yl]methyl]-8-oxo-, (6R,7R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

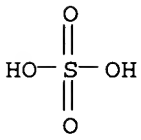
CRN 689294-77-7
CMF C26 H33 N11 O8 S2

Absolute stereochemistry.
Double bond geometry as shown.



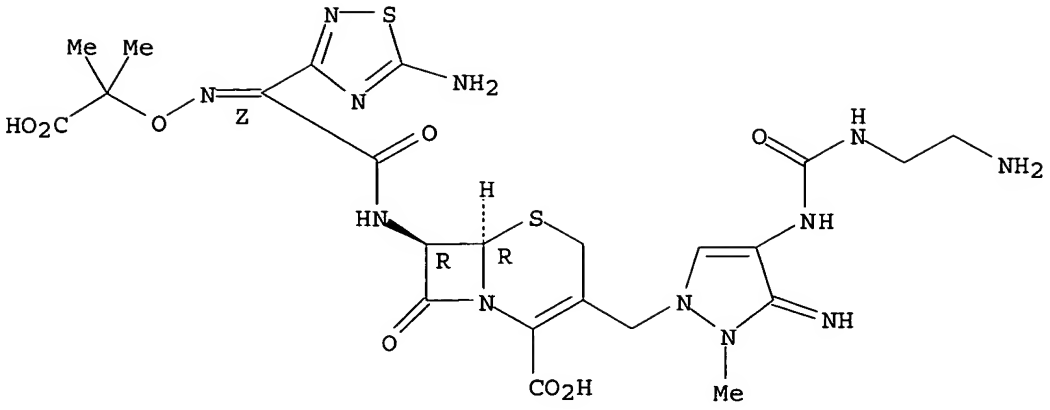
CM 2

CRN 7664-93-9
CMF H2 O4 S



IT **689293-68-3P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(synthesis of (thiadiazolyliminoacetamido)(pyrazoliomethyl)cephem compds. as antimicrobial agents)
RN 689293-68-3 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[4-[[[(2-aminoethyl)amino]carbonyl]amino]-2,3-dihydro-3-imino-2-methyl-1H-pyrazol-1-yl]methyl]-7-[[(2Z)-(5-amino-1,2,4-thiadiazol-3-yl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

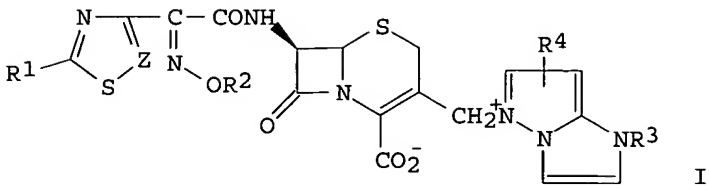


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:655895 HCAPLUS
DOCUMENT NUMBER: 115:255895
TITLE: Preparation of new cephem compounds
INVENTOR(S): Sakane, Kazuo; Kawabata, Kohji; Inamoto, Yoshiko
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 40 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 427248	A2	19910515	EP 1990-121341		19901108
EP 427248	A3	19920311			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
US 5215982	A	19930601	US 1990-604632		19901026
JP 03163087	A2	19910715	JP 1990-303243		19901107
CA 2029638	AA	19910511	CA 1990-2029638		19901109
US 5302712	A	19940412	US 1993-21470		19930223
PRIORITY APPLN. INFO.:			GB 1989-25404	A	19891110
			GB 1990-1778	A	19900125
			GB 1990-16688	A	19900730
			US 1990-604632	A3	19901026

OTHER SOURCE(S): MARPAT 115:255895
GI



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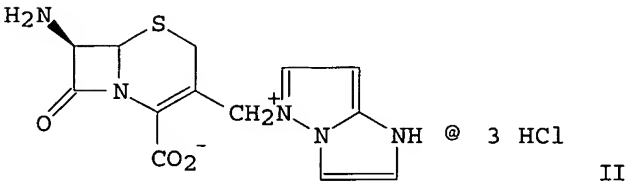

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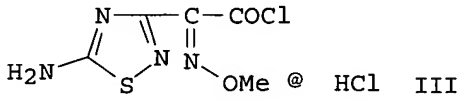


III

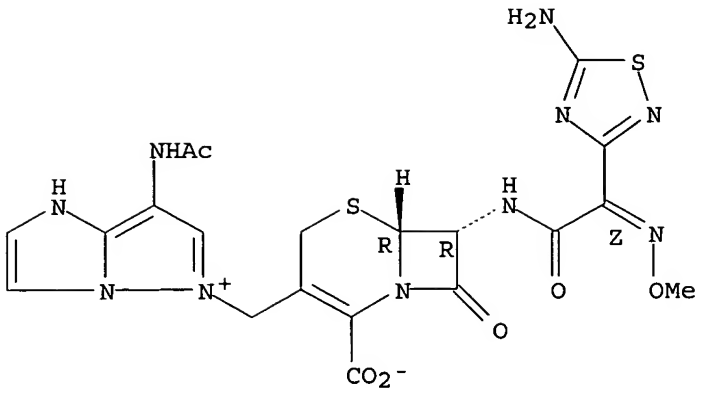
AB Cephem compds. [I; R1 = (protected) amino; R2 = H, organic radical; R3 = H, alkyl, (protected) hydroxyalkyl, aminoalkyl, etc.; R4 = H, alkyl, (protected) CO2H, NH2, H2NCO; Z = N, CH] and their salts, useful antimicrobials in treating infectious diseases, are prepared To a solution of 0.9 g II and 2.8 g AcNHSiMe3 in THF was added 0.59 g syn-III under ice-cooling and the mixture was stirred at room temperature to give 0.13 g syn-I
(R1 = R3 = R4 = H, R2 = Me), which showed min. inhibitory concentration of ≤0.025 μg/mL against Escherichia coli-31. Also prepared were 51 addnl. I.

IT **135855-24-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as antibacterial agent)

RN 135855-24-2 HCAPLUS

CN 1H-Imidazo[1,2-b]pyrazolium, 7-(acetylamino)-5-[[7-[[(5-amino-1,2,4-thiadiazol-3-yl)(methoxyimino)acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-, inner salt, [6R-[6α,7β(Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



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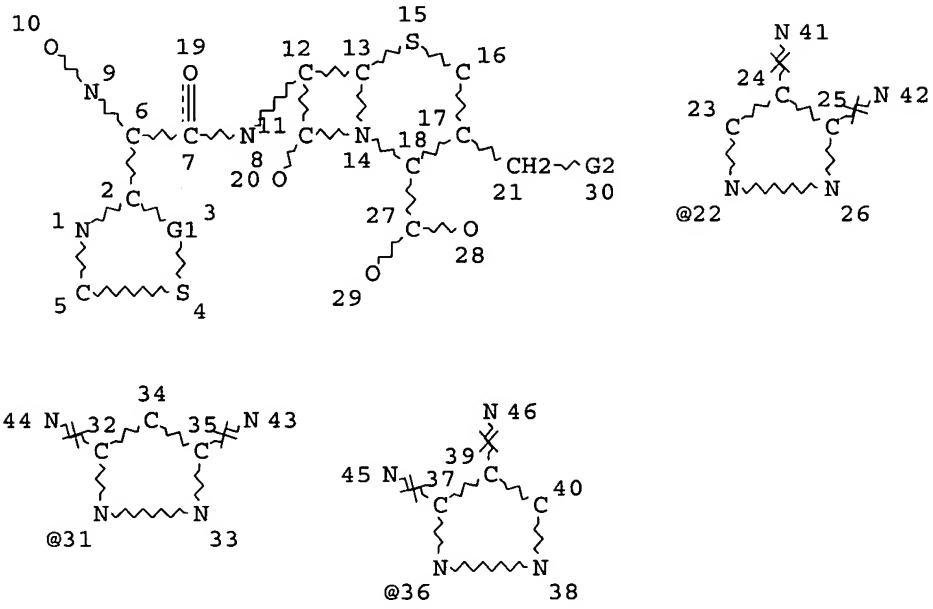
L8 STR



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VAR G2=22/31/36
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CONNECT IS E2 RC AT 8
CONNECT IS E2 RC AT 9
CONNECT IS E1 RC AT 20
CONNECT IS E1 RC AT 29
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 46

STEREO ATTRIBUTES: NONE

L12 0 SEA FILE=BEILSTEIN SSS FUL L8

100.0% PROCESSED 5 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.12